

09/29

Notice of Allowability	Application No.	Applicant(s)	
	09/537,786	FUJII, MASATSUGU	
	Examiner	Art Unit	
	Charles Chow	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/7/2004.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ The drawings filed on 20 March 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Applicant amended independent claims 1-2, 15-16 with allowable features, the outputting a word whose word length is constant. Claims 1-16 are allowable over the prior art of record, the prior art fails to teach singly, particularly, or in combination, the subject matter, for the coding, decoding, assistant equipment, radio transmitter/receiver, having operating object holding means (11, Fig. 1) for sequentially holding each word respectively consisting of plural bits of transmission information, and divided into constant word lengths; the argument holding means for holding an argument that should be applied to an operation that is performed on a word that is subsequently held by the operating object holding means, and the argument being included in said word being held by said operating object holding means and/or the result of an operation performed in advance on the word be held by said operating object holding means; and operation means for performing operation in accordance with logical values of individual bits that are included in the word being held by said operating object holding means and the argument being held by the argument holding means, coding that is defined as a logical operation to be performed on a combination of said logical values and for outputting a word whose word length is constant, in claims 1-2, 15-16, Fig. 1, as argued in page 8-9, remark of applicant's amendment received on 10/7/2004, after final office action. The dependent claims are also allowable due to their dependency upon the independent claims.

The closest patent to Tichener (US 4,670,890) teaches the holding of incoming base set C^0 in the input code means 29 (col. 41, lines 41-45) for the dividing input word into constant the

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word length of n bits (abstract), the prefixing processor for process augmented code for q times (col. 41, lines 55-67, Fig. 6b). Tichener fails to teach the argument holding means for perform operation on a combination logical value for outputting a word whose word length is constant.

Other prior arts in below has been considered, but they fail to teach the above claimed features.

Kawazoe et al. (US 5,327,441) teaches the convolution encoder and decoder of arbitrary length with arbitrary coding rate (col. 3, 40-43, col. 3, lines 40-68; col. 13, lines 20-53), for performing combination logic operation (Fig. 12, col. 4, lines 33-36). Kawazoe fails to teach the argument holding means for perform operation on a combination logical value for outputting a word whose word length is constant.

Lan et al. (US 5,787,099) teaches encoding and decoding using numerical computation in Galois fields (title). The integrated circuits and combinational logic (Figure in cover page, Fig. 1-20b), the encoder/decoder 101 and holding register 105, for using multiplies to detect/correct errors in certain position (abstract). Lan fails to teach the argument holding means for perform operation on a combination logical value for outputting a word whose word length is constant.

Kindred et al. (US 5,710,784) teaches the viterbi decoder in a CDMA system (title, abstract, figure in cover page) which comprises a decoder, with input/output buffer, for simultaneously decoding at multiple packet data rate, creating quality metric. The decoder could be reconfigured for different convolution encoding algorithms (abstract, Fig. 5, col. 1, lines 21-25), such as the tree code with length constraint k (col. 9, lines 35-47), for reducing

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the global sequences and selecting the best local path for generating the convolution codes.

Kindred fails to teach the argument holding means for perform operation on a combination logical value for outputting a word whose word length is constant.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

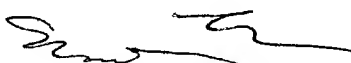
or faxed to: (703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to 220 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202 (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow *C.C.*

December 10, 2004.


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600